

CLEANING AGENT, METHOD FOR PRODUCING THE CLEANING AGENT, APPARATUS FOR PRODUCING THE CLEANING AGENT AND CLEANING METHOD USING THE CLEANING AGENT

Publication number: JP2002038195 (A)

Publication date: 2002-02-06

Inventor(s): SOTOE KOJI; NARITA AKIRA + (SOTOE KOJI, ; NARITA AKIRA)

Applicant(s): CLOSS CO LTD; STARTACK KK + (CLOSS CO LTD, ; STARTACK KK)

Classification:

- **international:** B08B3/08; C02F1/46; C02F5/00; C11D11/00; C11D17/08; C11D7/26; C11D7/60; C23G1/02; C25B1/04; H01L21/304; B08B3/08; C02F1/46; C02F5/00; C11D11/00; C11D17/08; C11D7/22; C11D7/60; C23G1/02; C25B1/00; H01L21/02; (IPC1-7): B08B3/08; C02F1/46; C02F5/00; C11D11/00; C11D17/08; C11D7/26; C11D7/60; C23G1/02; C25B1/04; H01L21/304

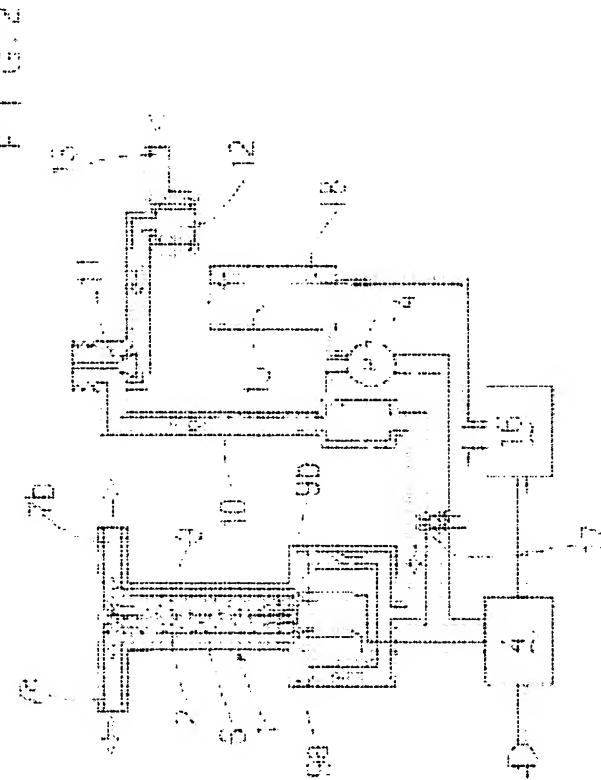
- **European:**

Application number: JP20000226433 20000727

Priority number(s): JP20000226433 20000727

Abstract of JP 2002038195 (A)

PROBLEM TO BE SOLVED: To provide an industrial cleaning agent having high safety and excellent in cleaning performance. **SOLUTION:** The cleaning agent contains an electrolytic water obtained by applying voltage on pure water after adding citric acid using an electrolytic auxiliary adding device 15. Thus, troubles regarding the safety to human body are completely removed, and especially in the cleaning of a polishing apparatus for semiconductor or the like in which mixing of metallic ion (alkali metal) is extremely disadvantageous, an influence of such pollutant is completely removed, and further, high cleaning performance is acquired.



Data supplied from the **espacenet** database — Worldwide

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 2002:98830 CAPLUS Full-text
 DN 136:153128
 ED Entered STN: 06 Feb 2002
 TI Production method and apparatus for industrial cleaning agent and
 cleaning
 method using the agent
 IN Sotoe, Hiroshi; Narita, Akira
 PA Kros Y. K., Japan; Star Tack K. K.
 SO Japan Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 CC 46-6 (Surface Active Agents and Detergents)
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002038195 20000727 <-- PRAI JP 2000-226433	A	20020206 20000727	JP 2000-226433	.

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2002038195 C02F0005-00 [ICS,7]; C25B0001-04 [ICS,7]; C02F0001-46 [I,C*]; C02F0001-46 [I,A]; C02F0005-00 [I,C*]; C02F0005-00 [I,A]; C11D0007-22 [I,C*]; C11D0007-26 [I,A]; C11D0007-60 [I,C*]; C11D0007-60 [I,A]; C11D0011-00 [I,C*]; C11D0011-00 [I,A]; C11D0017-08 [I,C*]; C11D0017-08 [I,A]; C23G0001-02 [I,C*]; C23G0001-02 [I,A]; C25B0001-00 [I,C*]; C25B0001-04 [I,A]; H01L0021-02 [I,C*]; H01L0021-304 [I,A]	IPCI B08B0003-08 [I,C*]; B08B0003-08 [I,A]; IPC H01L0021-02 [I,C*] B08B0003-08 [I,C*]; B08B0003-08 [I,A]; [I,C*]; C02F0001-46 [I,A]; C02F0005-00 [I,C*]; C02F0005-00 [I,A]; C11D0007-22 [I,C*]; [I,A]; C11D0007-60 [I,C*]; C11D0007-60 [I,A]; C11D0011-00 [I,C*]; C11D0011-00 [I,A]; [I,C*]; C11D0017-08 [I,A]; C23G0001-02 [I,C*]; C23G0001-02 [I,A]; C25B0001-00 [I,C*]; C25B0001-04 [I,A]; H01L0021-02 [I,C*]; H01L0021-304 [I,A]	

AB The cleaning agent is an electrolytic water comprises auxiliary agent selected from citric acid, ascorbic acid, oxalic acid, acetic acid, formic acid, and glycolic acid, wherein the agent is directly contacting with target material for cleaning purpose. An illustration on the cleaning apparatus and process is given.

12

ANSWER 1 OF 1 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
AN 2002-376219 [200241] WPIX Full-text
DNC C2002-106556 [200241]
DNN N2002-294107 [200241]
TI Washing agent for industrial use, comprises electrolyzed water
with
electrolysis adjuvant chosen from citric acid, ascorbic acid,
oxalic acid,
acetic acid, formic acid and glycolic acid
DC D25; P43; U11
IN NARITA A; SOTOE K
PA (KURO-N) KUROSU YG; (STAR-N) STARTACK KK
CYC 1
PI JP 2002038195 A 20020206 (200241)* JA 8[3]
<--
ADT JP 2000-226433 20000727
PRAI JP 2000-226433 20000727
IPCR B08B0003-08 [I,A]; B08B0003-08 [I,C]; C02F0001-46 [I,A]; C02F0001-
46
[I,C]; C02F0005-00 [I,A]; C02F0005-00 [I,C]; C11D0011-00 [I,A];
C11D0011-00 [I,C]; C11D0017-08 [I,A]; C11D0017-08 [I,C]; C11D0007-
22
[I,C]; C11D0007-26 [I,A]; C11D0007-60 [I,A]; C11D0007-60 [I,C];
C23G0001-02 [I,A]; C23G0001-02 [I,C]; C25B0001-00 [I,C]; C25B0001-
04
[I,A]; H01L0021-02 [I,C]; H01L0021-304 [I,A]
FCL B08B0003-08 Z; C02F0001-46 A; C02F0005-00 610 H; C02F0005-00 620 B;
C02F0005-00 620 C; C02F0005-00 620 D; C11D0011-00; C11D0017-08;
C11D0007-26; C11D0007-60; C23G0001-02; C25B0001-04; H01L0021-304
622 Q
FTRM 3B201; 4D045; 4D061; 4H003; 4K021; 4K053; 5F057; 4K021/AA01;
3B201/AA03;
3B201/AA13; 4K021/AB25; 3B201/AB51; 4K021/BA02; 4H003/BA12;
4K021/BA19;
3B201/BB05; 3B201/BB21; 3B201/BB88; 3B201/BB89; 3B201/BB90;
3B201/BB92;
3B201/BB93; 3B201/BB96; 4H003/CA15; 3B201/CC21; 4D061/DA03;
4H003/DA09;
4K021/DA09; 4H003/DA15; 4K021/DB05; 4D061/DB07; 4K021/DB12;
4K021/DB18;
4K021/DB28; 4H003/DC04; 4K021/DC15; 4D061/EA02; 4D061/EB01;
4D061/EB04;
4H003/EB07; 4H003/EB08; 4D061/EB12; 4D061/EB14; 4D061/EB37;
4D061/EB39;
4D061/EC01; 4D061/EC02; 4H003/ED02; 4D061/ED12; 4H003/FA01;
4H003/FA03;
4D061/GA22; 4D061/GA23; 4D061/GC02; 4K053/PA06; 4K053/QA01;
4K053/RA07;
4K053/RA45; 4K053/RA46; 4K053/RA47; 4K053/RA48; 4K053/SA05;
4K053/TA15;
4K053/YA11
AB JP 2002038195 A UPAB: 20050525
NOVELTY - Washing agent comprises electrolyzed water and an
electrolysis adjuvant chosen from citric acid, ascorbic acid,
oxalic acid, acetic acid, formic acid and/or glycolic acid. The
electrolyzed water is obtained by applying a voltage to water.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (i) Manufacturing method of washing agent;
- (ii) Manufacturing apparatus of washing agent;
- (iii) Cleaning method using the washing agent.

USE - For industrial use.

ADVANTAGE - Use of the washing agent is safe, which offers high washing capability.

DESCRIPTION OF DRAWINGS - The figure shows the explanatory view of manufacturing apparatus for washing agent.

tank (1)
Anode (2)
Cathode (3)
Electric power device (4)
Diaphragm (6)

TECH INORGANIC CHEMISTRY - Preferred Process: After adding citric acid to pure

water, the electrolyzed water is added.

FS CPI; GMPI; EPI
MC CPI: D11-B
EPI: U11-C06A1A

PATENT ABSTRACTS OF JAPAN

(11)Publication number : **2002-038195**
(43)Date of publication of application : **06.02.2002**

(51)Int.Cl. C11D 7/26
B08B 3/08
C02F 1/46
C02F 5/00
C11D 7/60
C11D 11/00
C11D 17/08
C23G 1/02
C25B 1/04
H01L 21/304

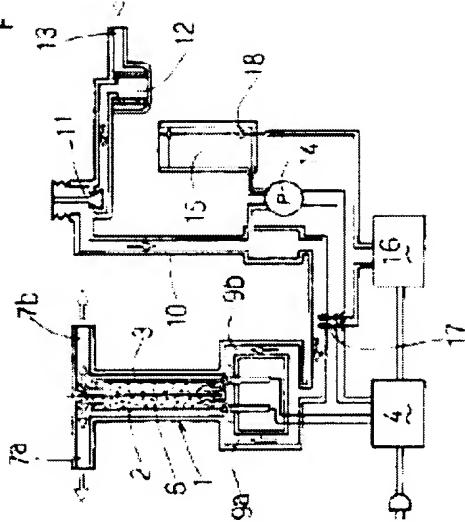
(21)Application number : 2000-226433 (71)Applicant : CLOSS CO LTD

STARTACK KK

(22)Date of filing : **27.07.2000** (72)Inventor : **SOTOE KOJI
NARITA AKIRA**

(54) CLEANING AGENT, METHOD FOR PRODUCING THE CLEANING AGENT, APPARATUS FOR PRODUCING THE CLEANING AGENT AND CLEANING METHOD USING THE CLEANING AGENT

F 1 G.2



(57)Abstract:

PROBLEM TO BE SOLVED: To provide an industrial cleaning agent having high safety and excellent in cleaning performance.

SOLUTION: The cleaning agent contains an electrolytic water obtained by applying voltage on pure water after adding citric acid using an electrolytic auxiliary adding device 15. Thus, troubles regarding the safety to human body are completely removed, and especially in the cleaning of a polishing apparatus for semiconductor or the like in which mixing of metallic ion (alkali metal) is extremely disadvantageous, an influence of such pollutant is completely removed, and further, high cleaning performance is acquired.